## REMARKS

This is a full and timely response to the outstanding final Office Action mailed July 25, 2003. Reconsideration and allowance of the application and pending claims are respectfully requested.

### I. Claim Rejections - 35 U.S.C. § 102(a)

#### A. Statement of the Rejection

Claims 2-9, and 19 have been rejected under 35 U.S.C. § 102(a) as being anticipated by MacInnis, et al. ("MacInnis," U.S. Pat. No. 6,501,480).

The rejection states that MacInnis discloses Applicant's invention as recited in the above-identified claims. Applicant respectfully traverses this rejection.

#### B. Applicant's Claimed Invention

As provided in independent claims 2 as amended, Applicant claims:

> 2. A device for producing a composite graphical data stream containing pixel data corresponding to an image to be rendered, the composite graphical data stream being formed from multiple graphical data streams, each of the multiple graphical data streams being provided by a graphics pipeline, each graphics pipeline being configured to process pixel data corresponding to at least a portion of the image to be rendered, said device comprising:
>
> an input mechanism configured to receive the multiple graphical data streams from the graphics pipelines, provide a frame of data corresponding to the image to be rendered, and insert pixel data from the multiple graphical data streams into said frame of data such that, in response to receiving a first of the multiple graphical data streams, said input mechanism provides said frame of data and **inserts the pixel data from the first of the multiple graphical data streams into said frame of data to form at least a portion of the composite graphical data stream**;

wherein said input mechanism has a **first compositing element** and a **second compositing element**, said first compositing element being configured to provide said frame of data in response to receiving pixel data corresponding to the first of the multiple graphical data streams, **said first compositing element being further configured to insert the pixel data corresponding to the first of the multiple graphical data streams into said frame of data to form a first compositing graphical data stream, said pixel data corresponding to the first of the multiple graphical data streams and a first displayed portion of said image, said second compositing element being configured to receive pixel data corresponding to the second of the multiple graphical data streams and said first compositing graphical data stream, said pixel data corresponding to the second of the multiple graphical data streams and a second displayed portion of said image**, said second compositing element being further configured to combine the pixel data corresponding to the second of the multiple graphical data streams and said first compositing graphical data stream to form a second compositing digital video data stream. (Emphasis added).

C. **Discussion of the Rejection**

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of *each element* of the claim under consideration." W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983) (emphasis added). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(a).

In the present case, not every feature of the claimed invention is represented in the MacInnis reference. For example, MacInnis does not disclose "**said first compositing element being further configured to insert the pixel data corresponding to the first of the multiple graphical data streams into said frame of data to form a first compositing graphical data stream, said pixel data corresponding to the first of the multiple graphical data streams and a first displayed portion of said image, said second compositing element being configured**

**to receive pixel data corresponding to the second of the multiple graphical data streams and said first compositing graphical data stream, said pixel data corresponding to the second of the multiple graphical data streams and a second displayed portion of said image.**" In MacInnis, a "blending" operation is described, and this blending occurs in the z-direction (*e.g.*, perpendicular to a spatial x-y plane). In column 44, lines 31-35 state:

> In general, during blending of different layers of graphics and/or video, every layer {L1, L2, L3 ...Ln}, where L1 is the back-most layer, each layer is blended with the composition of all of the layers behind it, beginning with L2 being blended on top of L1.

From the referenced section of MacInnis reproduced above, the image displayed appears to be the result of a blending operation of a plurality of layers, not from a frame of data generated by a compositing element that includes pixel data corresponding to separate displayed portions of an image. For example, an optimization embodiment (described in claim 2) of Applicant's disclosure can generally be viewed as "breaking-down" an image into multiple, segregated portions, with each graphics pipeline dedicated to the processing of the segregated portions. The compositor receives these multiple graphics data streams, and inserts the data from each portion into a frame of data. Thus, the optimization embodiment inserts pixels from multiple graphics pipelines into a frame of data, and the pixels that are inserted correspond to spatially different x-y coordinates of an image, and are not blended as that term is used in MacInnis.

Additionally, the first and second compositing elements of MacInnis are not performing the same function as described in claim 2 of Applicant's invention. The Office Action states in the Response to Arguments Section (line #14) that,

> MacInnis discloses multiple compositors: *a video compositor* (column 8, Lines 61-67), *a graphics compositor engine*...composited in other line buffers (Column 47, line 25-39)...

Clearly, MacInnis is compositing a video signal with a graphics signal, wherein the graphics signal is already blended at this point. Thus, MacInnis does not disclose "**said first compositing element being further configured to insert the pixel data corresponding to the first of the multiple graphical data streams into said frame of data to form a first compositing graphical data stream, said pixel data corresponding to the first of the multiple graphical data streams and a first displayed portion of said image, said second compositing element being configured to receive pixel data corresponding to the second of the multiple graphical data streams and said first compositing graphical data stream, said pixel data corresponding to the second of the multiple graphical data streams and a second displayed portion of said image.**"

Due to these clear shortcomings of the MacInnis reference, Applicant respectfully asserts that MacInnis does not anticipate Applicant's claim 2. Therefore, Applicant respectfully requests that the rejection of claim 2 and claims 3-4, 6-8, and 19, which depend therefrom, be withdrawn.

## II. Newly Added Claim

As identified above, claim 20 has been added into the application through this response, and claim 5 has been amended to depend therefrom. As described with regards to claim 2, the image displayed in MacInnis appears to be the result of a blending operation of a plurality of layers, not from a frame of data generated by a compositing element that includes pixel data corresponding to separate displayed portions of an

the MacInnis references does not disclose "said **first compositing element** being further configured to insert the pixel data corresponding to the first of the multiple digital video data streams into said frame of data to form a first compositing digital video data stream, **said pixel data corresponding to the first of the multiple digital video data streams and a first displayed portion of said image**, said **second compositing element** being configured to receive pixel data corresponding to the second of the multiple digital video data streams and said first compositing digital video data stream, **said pixel data corresponding to the second of the multiple digital video data streams and a second displayed portion of said image**."

Applicant therefore respectfully submits that claims 20, 5, and 9 (which depends from claim 5) describe an invention novel and unobvious in view of the prior art of record and, therefore, respectfully requests that these claims be held to be allowable.

Additionally, Applicant does not see the stereo embodiments disclosed in the referenced portions of the MacInnis specification (FIGS. 1-3, Col. 1, lines 39-55; Col. 4, lines 1-29), and thus respectfully requests clarification or directions as to what in particular is pointing to the stereo embodiments of claims 5 and 9.

## CONCLUSION

Applicant respectfully submits that pending claims 2-9, 19, and 20 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, Virginia 22313-1450, on

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